JAN 2 2 2002

SEQUENCE LISTING

<110> Hattep MDFKarine Cornelia Schouten, Govert Johan Uytdehaag, Alphonsus Gerardus Cornelis Maria Bout, Abraham RECOMBINANT PROTEIN PRODUCTION IN A HUMAN CELL <120> <130> 4038.1US <140> 09/549,463 <141> 2000-04-14 06/129,452 <150> <151> 1999-04-15 <160> 32 <170> PatentIn version 3.1 <210> <211> 41 <212> DNA <213> Artificial Sequence <220> <223> PCR Primer-DHFR up <400> 41 gatecaegtg agatetecae catggt#ggt tegetaaact g <210> 2 37 <211> <212> DNA <213> Artificial Sequence <220> PCR Primer-DHFR down <223> <400> 37 gatccacgtg agatctttaa #cattcttct catatac <210> 3 <211> 85 DNA <212> <213> Artificial Sequence <220> <223> polylinker fragment <400> 3 60 accggtgaat tcggcgbgcc gtcgacgata tcgatcggac cgacgcgttc gcgagcggcc 85 gcaattcgct agcgtfaacg gatcc <210> 4 <211> 86 <212> <213> Artifi¢ial Sequence <220> <223> polyl‡nker fragment-pIPspAdapt7

<400>

60

accggtgaat #gcggccgct cgcgaacgcg tcggtccgta tcgatatcgt cgacggcgcg

ccgaat	tege tagegttaac ggatee /	86
<210><211><211><212><213>	5 43 DNA Artificial Sequence	
<220> <223>	PCR Primer-EPO-START	
<400> aaaaag	5 gate egecaceatg ggggtgeacg aatgteetge etg	43
<210><211><211><212><213><220><223>	6 38 DNA Artificial Sequence PCR Primer-EPO-STOP	
<400> aaaaagg	6 gate eteatetgte ecetgteetg caggeete	38
<210><211><211><212><212><213><220>	7 47 DNA Artificial Sequence	
<223>	PCR Primer-LTR-1	
<400> ctgtacg	7 gtac cagtgcactg gcc#aggcat ggaaaaatac ataactg /	47
<210><211><212><212><213><220>	8 64 DNA Artificial Sequence	
<223>	PCR Primer-LTR/2	
<400> gcggato	8 ectt cgaaccatgg taagettggt accgetageg ttaaccggge gactcagtca	60
atcg		64
<210><211><211><212><213><220>	9 28 DNA Artificial Sequence	
<223> <400> gcgccac	PCR Primer-HSA1 9 ccat gggcagagcg atggtggc	28
<210>		

<211> 50

<213>	Artificial Sequence	
<220>	DCD Drimon HCA2	
<223>	PCR Primer-HSA2	
<400>	10	
	teta agettgtega eategateta etaacagtag agatgtagaa	50
.010.	11	
<210> <211>	11 /	
<211>	DNA /	
<213>	Artificial Sequence /	
<220>	/	
<223>	Oligonucleotide /	
<400>	11 /	1.0
ttaagt	egac /	10
<210>	12	
<211>	10	
<212>	DNA /	
<213>	Artificial Sequence /	
<220>		
<223>	oligonucleotide-EcoRI linker	
<400>	12	
ttaagt		10
	/	
<210>	13 /	
<211> <212>	DNA /	
<213>	Artificial Sequence /	
<220>	morriotal baquenos	
<223>	oligonucleotide-Pac∜ linker	
	f	
<400>	13	2.2
aattgt	ctta attaaccgct taa/	23
	ĵ	
<210>	14	
<211>	67	
<212>	DNA .	
<213>	Artificial Sequence	
<220>		
<223>	oligonucleotide-PLL-1	
<400>	14	
	ccta ggaagettgg taceggtgaa ttegetageg ttaaeggate etetagaega	60
3,4000	,	
gatctg	3	67
	; ;	
<210>	15 /	
<210>	67	
<212>	DNA	
<213>	Artificial Sequence	
<220>	;	
<223>	oligonucleotide-PLL-2	

<400>	15 /	
	ctcg tctagaggat ccgttaacgc tagcgaattc accggtacca agcttcctag	60
Ccagac	cres recagaggar regeradese ragegadere aceggineed agencerag	0.0
	/	
ggatgg	c /	67
	/	
<210>	16	
<211>	39	
<212>	DNA /	
<213>	Artificial Sequence	
	Artificial Sequence	
<220>		
<223>	PCR Primer-CMVplus	
	/	
<400>	16	
gatcgg	tacc actgcagtgg tcaatattgg ccat£agcc	39
	/	
<210>	17	
<211>	29	
<212>	DNA /	
<213>	Artificial Sequence /	
<220>	/	
<223>	PCR Primer-CMVminA	
	/	
<400>	17	
	gett ccaatgcaec gtteccége	29
gaccaa	gett ceaatgeace greecegge	4,5
	/	
<210>	18	
<211>	34 /	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	PCR Primer-CAMH-UP	
<2237	PCK PITMET-CAMPOP	
100	10	
<400>	18	٠.
gatcgat	tate getageacea/agggeeeate ggte	34
<210>	19 /	
<211>	30	
<212>	DNA	
<213>	Artificial Sequence	
	Artificial sequence	
<220>		
<223>	PCR Primer-CAMH-DOWN	
	,	
<400>	19	
gatcqtt	ttaa actcatttac ccggagacag	30
<210>	20 /	
<211>	28 /	
	· · · · · · · · · · · · · · · · · · ·	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	PCR Primer-CAML-UP	
	\tilde{I}	
<400>	20 /	
	tacg gtggctgcac catctgtc	28
Jacoby	2009 3003 0000 0000 0000	~ 0

<210> 2/1

```
<211> 31
<212> DNA
<213> Artificial Sequence
<220>
<223>
      PCR Primer-CAML-DOWN
<400> 21
gategtttaa aeetaacact eteceetgtt g
                                                                       31
<210>
       22
       20
<211>
      PRT
<212>
      Artificial Sequence
<213>
<220>
<223> leader peptide sequende
<400> 22
Met Ala Cys Pro Gly Phe Leu Trp Ala Leu Val Ile Ser Thr Cys Leu
                5
                                    10
Glu Phe Ser Met
            20
<210>
       23
<211>
       60
<212>
      DNA
      Artificial Séquence
<213>
<220>
<223> oligonucleotide-leader peptide coding sequence
<400> 23
atggcatgcc ctggct/tect gtgggcactt gtgateteca cetgtettga attttecatg
<210>
       24
<211>
       38
<212>
       DNA
<213>
       Artificial Sequence
<220>
<223> PCR Primer-UBS-UP
<400> 24
                                                                       38
gatcacgcgt gctagccacc atggcatgcc ctggcttc
<210>
       25
<211>
       20
<212>
       PR/T
<213>
      Artificial Sequence
<220>
<223>
      l'eader peptide
<400> /25
Met Ala Cys Pro Gly Phe Leu Trp Ala Leu Val Ile Ser Thr Cys Leu
```

```
Glu Phe Ser Met'
       26
<210>
<211>
       60
<212> DNA
<213> Artificial Sequence
<220>
<223> oligonucleotide-leader peptide coding sequence
<400> 26
atggcatgee etggetteet gtgggeaett gtgateteea eetgtettga atttteeatg 60
<210>
       27
<211>
       28
<212> DNA
<213> Artificial Sequence
<220>
<223> oligonucleotide-PCR pr∳duct
<400> 27
                                                                      28
gategetage tgtegagaeg gtgaeeag
<210>
      28
<211>
      29
<212> DNA
<213> Artificial Sequence
<220>
<223> oligonucleotide-PCR product
<400> 28
                                                                      29
gatecgtacg ettgatetee a¢ettggte
<210>
      29
      50
<211>
<212>
      DNA
      Artificial Sequence
<213>
<220>
<223> PCR Primer-15/C5-UP
<400> 29
qatcacgcgt gctagccacc atgggtactc ctgctcagtt tcttggaatc
                                                                      50
<210>
      30
<211>
      41
      DNA
<212>
<213> Artificial Sequence
<220>
<223> PCR Primer-HA1 forward primer
<400> 30
                                                                      41
attggcgcgc caccatgaag actatcattg ctttgagcta c
<210>
       31
<211>
      39
```

<212> DNA,

<220> • '
{220}
<223> PCR Primer-HAl reverse primer
<400> 31
gatgctagct catctagttt gtttttctgg tatattcc/g/
<i>* /</i>
<210> 32
//
<211> 42 / /
<212> DNA //
<213> Artificial Sequence //
<220>
<223> PCR Primer-HA2 reverse primer/
ℓ
<400> 32 / /
qatqctaqct cagtctttgt atcctgact# cagttcaaca cc 42

7

** | * |

- 27